

CLAIMS

What is claimed is:

1 1. A method for providing centralized access to instrumentation count event
2 information generated by simulation testing of a hardware simulation model, wherein
3 said simulation testing is performed within a batch simulation farm by multiple
4 simulation clients communicating with an instrumentation server, said method
5 comprising:

6 generating an entity list within a simulation client, wherein said entity list
7 includes an identifier for each design entity within said hardware simulation model that
8 has at least one instantiated instrumentation count event;

9 delivering said entity list from said simulation client to said instrumentation
10 server; and

11 associating said entity list with an identifier for said hardware simulation model
12 within said instrumentation server such that instrumentation count event information is
13 accessible from said instrumentation server by individual design entity information.

1 2. The method of claim 1, wherein said entity list is generated during model build
2 processing of said hardware simulation model prior to simulation of said hardware
3 simulation model by said simulation client.

1 3. The method of claim 1, wherein said associating said entity list to an HDL
2 simulation model identifier comprises generating a translation table that includes entries
3 indexed in accordance with said design entity identifiers.

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References

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1 7. A system for providing centralized access to instrumentation count event
2 information generated by simulation testing of a hardware simulation model, wherein
3 said simulation testing is performed within a batch simulation farm by multiple
4 simulation clients communicating with an instrumentation server, said system
5 comprising:

6 processing means for generating an entity list within a simulation client, wherein
7 said entity list includes an identifier for each design entity within said hardware
8 simulation model that has at least one instantiated instrumentation count event;

9 processing means for delivering said entity list from said simulation client to said
10 instrumentation server; and

11 processing means for associating said entity list with an identifier for said
12 hardware simulation model within said instrumentation server such that instrumentation
13 count event information is accessible from said instrumentation server by individual
14 design entity information.

1 8. The system of claim 7, wherein said entity list is generated during model build
2 processing of said hardware simulation model prior to simulation of said hardware
3 simulation model by said simulation client.

1 9. The system of claim 7, further comprising processing means for generating a
2 translation table that includes entries indexed in accordance with said design entity
3 identifiers.

1 10. The system of claim 9, wherein said translation table includes entries indexed in
2 accordance with each design entity identifier included with each entity list file received
3 within said instrumentation server, said system further comprising processing means for

mapping said hardware simulation model identifier to each translation table entry indexed by a design entity identifier corresponding to a design entity included within said hardware simulation model.

11. The system of claim 7, further comprising:

processing means for simulating said hardware simulation model within a simulation client;

processing means for delivering an aggregate count event packet from said simulation client to said instrumentation server, wherein said aggregate count event packet includes count event data recorded during said simulation; and

processing means within said instrumentation server for storing said count event data within cumulative count data storage files.

12. The system of claim 11, wherein said processing means for storing said count event data within cumulative count data storage files further comprises:

processing means for associating said count event data with a specified time period within a higher level count event directory; and

processing means for associating said count event data with a specified hardware simulation model within a lower level directory, wherein said lower level directory is subsumed by said higher level directory such that count event data can be queried first by time and second by hardware simulation model identity.

1 13. A computer program product for providing centralized access to instrumentation
2 count event information generated by simulation testing of a hardware simulation model,
3 wherein said simulation testing is performed within a batch simulation farm by multiple
4 simulation clients communicating with an instrumentation server, said computer program
5 product comprising:

6 program instruction means for generating an entity list within a simulation client,
7 wherein said entity list includes an identifier for each design entity within said hardware
8 simulation model that has at least one instantiated instrumentation count event;

9
10 program instruction means for delivering said entity list from said simulation
client to said instrumentation server; and

11
12 program instruction means for associating said entity list with an identifier for
13 said hardware simulation model within said instrumentation server such that
14 instrumentation count event information is accessible from said instrumentation server
by individual design entity information.

1 14. The computer program product of claim 13, wherein said entity list is generated
2 during model build processing of said hardware simulation model prior to simulation of
3 said hardware simulation model by said simulation client.

1 15. The computer program product of claim 13, further comprising program
2 instruction means for generating a translation table that includes entries indexed in
3 accordance with said design entity identifiers.

1 16. The computer program product of claim 15, wherein said translation table
2 includes entries indexed in accordance with each design entity identifier included with
3 each entity list file received within said instrumentation server, said computer program

product further comprising program instruction means for mapping said hardware simulation model identifier to each translation table entry indexed by a design entity identifier corresponding to a design entity included within said hardware simulation model.

17. The computer program product of claim 13, further comprising:

program instruction means for simulating said hardware simulation model within a simulation client;

program instruction means for delivering an aggregate count event packet from said simulation client to said instrumentation server, wherein said aggregate count event packet includes count event data recorded during said simulation; and

program instruction means within said instrumentation server for storing said count event data within cumulative count data storage files.

18. The computer program product of claim 17, wherein said program instruction means for storing said count event data within cumulative count data storage files further comprises:

program instruction means for associating said count event data with a specified time period within a higher level count event directory; and

program instruction means for associating said count event data with a specified hardware simulation model within a lower level directory, wherein said lower level directory is subsumed by said higher level directory such that count event data can be queried first by time and second by hardware simulation model identity.